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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,059	11/07/2007	Gunter Klein	PAT-01147	1969
26922	7590	04/14/2009	EXAMINER	
BASF CORPORATION			NGUYEN, VU ANH	
Patent Department				
1609 BIDDLE AVENUE			ART UNIT	PAPER NUMBER
MAIN BUILDING				
WYANDOTTE, MI 48192			1796	
			NOTIFICATION DATE	DELIVERY MODE
			04/14/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/595,059	KLEIN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Vu Nguyen	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 30 January 2009.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-19, 21, 24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-19, 21, 24 and 25 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ .  | 6) <input type="checkbox"/> Other: _____ .                        |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Acknowledgement is made of the Amendment filed 01/30/2009, wherein claims 1-19, 21 and 24 have been amended, claim 20 has been cancelled, and new claim 25 has been added. Claims 1-19, 21, 24 and 25 are pending in this application. *Notes: Claim 24 is not a new claim as currently being labeled. It should be labeled as Currently Amended.*

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-17, 19, 21, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neppl et al. (WO 2002/044235) in view of Hoffmann et al. (US

5,326,820). Notes: Document US 2004/0063851) is being relied upon as an English equivalent of the document WO 2002/044235).

5. Regarding the limitations set forth in these claims, Neppl et al. (Neppl, hereafter) teaches a coating composition for use as clear coat in automotive industry, comprising, in one particular embodiment [0084], 34.56 wt% of an acrylic copolymer having a hydroxyl number of 100-250 (Claim 1), 13.44 wt% of a fluoropolymer resin, 24 wt% of Desmodur BL 3175 and 28 wt% of Vestanat B 1370; wherein the weight percents are based on the combined weights of these four components. It is noted that Desmodur BL 3175 is a ketoxime-blocked polyisocyanate based on HDI, and Vestanat B 1370 is an oxime-blocked polyisocyanate based on IPDI (see attached data from Evonik). These two species read on the claimed components C and D, respectively. A process of preparing the coating composition comprising mixing and homogenizing the four components in non-aqueous solvents is taught [0084]. Also taught is a method of applying the coating composition, as a clear coat, to a substrate followed by curing at 249°C [0089].

6. Clearly, Neppl teaches all the limitations set forth in these claims but fails to teach a polyester and a molecular weight as well as a T<sub>g</sub> of the acrylic copolymer.

7. Hoffmann et al. (Hoffmann, hereafter) teaches a clearcoat composition to be used in automotive refinishing (col. 1, lines 19-22), said composition comprising a hydroxyl-containing component (A), at least one polyisocyanate, organic solvents, and additives (col. 1, lines 10-18). The component A comprises 5-80 wt% of a cycloaliphatic polyester having an OH number of 30-150, an acid number of 5-50, an M<sub>n</sub> of 1,000-

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5,000, and the cycloaliphatic content is 5-100 mol% (col. 2, lines 30-40; col. 3, lines 1-

33), and 95-20 wt% of a polyacrylate having an  $M_n$  of 1,500-6,000, an OH number of

50-180 and an acid number of 5-20 (col. 2, lines 35-40; col. 5-6, bridging paragraph).

The polyisocyanate comprises hexamethylene diisocyanate and isophorone

diisocyanate (col. 4, lines 23-25). **[Motivations]** The disclosed clearcoat, due to the

combined use of the cycloaliphatic polyester and the polyacrylate, is said to be superior

to conventional clearcoats because it has improved drying capacity and better

processibility (col. 1, line 37) as well as good stability of gloss, crack resistance, filling

power, and good flow properties (col. 2, lines 1-15).

8. In light of such teachings, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the coating composition taught by Neppl by replacing the acrylic copolymer component with the hydroxyl-containing component taught by Hoffmann so as to improve such properties as drying capacity, processibility, gloss stability, crack resistance, filling power, and flowability.

9. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neppl et al. (WO 2002/044235) in view of Hoffmann et al. (US 5,326,820) as applied to claim 17 above, and further in view of O'Connor et al. (US 5,521,272).

10. Regarding the limitations set forth in this claim, the coating composition of claim 17 has been shown to be unpatentable over Neppl in view of Hoffmann as discussed

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above. However, Neppl fails to specifically teach polyisocyanate that is blocked with substituted pyrazoles.

11. O'Connor et al. (O'Connor, hereafter) teaches polyisocyanates that are blocked with substituted pyrazoles for use in clearcoats that are employed in automotive applications (col. 1, lines 15-18; col. 4, lines 9-32, Claim 1). Said blocked polyisocyanate is to be used with hydroxyl-containing polyacrylate and/or polyester (col. 3, lines 15-20). The polyisocyanates include hexamethylene diisocyanate and isophorone diisocyanate (Claim 1). **[Motivations]** The prior art teaches that conventional automotive clearcoats that use conventional blocked polyisocyanates as crosslinking agents and either elevated or reduced unblocking temperature suffer from yellowing problem whereas the disclosed blocked polyisocyanates can be cured at low temperature and do not have the yellow discoloration problem (col. 1, lines 15-67; col. 2, lines 1-10; col. 3, lines 1-8).

12. In light of such benefits, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have employed the blocked polyisocyanates taught by O'Connor in the clear coat composition taught by Neppl so that the unblocking temperature can be lowered and the resulting coatings are free of yellowing problem.

### ***Response to Arguments***

13. Applicant's arguments with respect to claims 1-17, 19-21 and 24 have been considered but are moot in view of the new ground(s) of rejection.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu Nguyen whose telephone number is (571)270-5454. The examiner can normally be reached on M-F 7:30-5:00 (Alternating Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vu Nguyen  
Examiner  
Art Unit 1796

/David Wu/  
Supervisory Patent Examiner, Art Unit 1796